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Dandelions are in bloom around Chicago now—Oct 30th—and have been for some weeks. At this rate, we may be able to truthfully say that “December’s as pleasant as May.”

The Perfume of Flowers is more clearly perceived just before or after a rain, because the air, then laden with a moisture, better conveys the essential oils that contribute the odor. So we read in one of our agricultural exchange papers.

The American Apiculturist has appeared for some months without a cover. It doesn’t look familiar. Probably Bro. Alley wanted the “Apl.” to look more like the “American Bee Journal.” All right, Bro. A., we have no patent on the coverless-bee-paper idea.

Mr. A. F. Brown, of Florida, reported in “Gleanings” a trifle over 26 tons of honey from 193 colonies, $4\frac{1}{4}$ tons being comb honey mostly in 12-ounce sections. Five tons of the crop was “orange” honey, and 21 tons from palmetto and mangrove. Mr. Brown practiced migratory bee-keeping, and his crop averaged about 275 pounds per colony. Pretty good for a poor year!

The September “Review” was mainly devoted to a study of the disease known as “bee-paralysis.” Nothing new was developed, but Editor Hutchinson asked those who have had experience with the disease to let him hear about it. The “American Bee Journal” has published much on this disease, but its cause and cure are still quite mysterious. Probably another season some new light may be thrown upon it.

Editor E. R. Root says in “Gleanings:” “Since I have discarded that editorial ‘we,’ somehow I feel more natural.” Now the “we” seems more “natural” to us. How funny it would be to use the “editorial I” in the “American Bee Journal.” “I” is sometimes egotistical, but “we” isn’t. Now, there’s a fine sentence—“I is” and “we isn’t.” But it’s correct. Guess we’ll stick to “we”—but let the “I’s” have it, if they want it.

Eight Numbers for 10 Cents.—

Yes, we will send the last eight numbers of the “American Bee Journal” for 1894, to any *new* name, for only 10 cents (stamps or silver). Now, here’s a good chance to get some of your bee-keeping friends started in taking the “Bee Journal” regularly. You just get them to read the eight numbers mentioned, and more than likely they will want to keep it up after that. If you have *three* bee-friends that you want should have the eight numbers, send us 25 cents with their names and addresses, and we will mail them to each. Remember this offer is for the *last eight numbers of 1894*—dated, Nov. 8, 15, 22 and 29; and Dec. 6, 13, 20 and 27.

If, then, at any time between now and

Feb. 1, 1895, you can secure the subscriptions of these "short termers" for the year 1895, you can count them as new subscribers and get the premiums as per our offers on page 578 of this issue. Eight "short term" subscribers at 10 cents each, will count the same as one new subscriber for a year, in earning premiums.

If you wish sample copies to use in securing the "short term" or other subscribers, let us know, and we will be glad to mail them to you free.

We ought to add thousands of names to our list on this very low offer—8 numbers for 10 cents! *Now is the time for earnest work!*

Mr. C. B. Bankston, of Chriesman, Tex., has been employed by Mrs. Atchley to work in her apiaries in 1895. Mr. B. is one of the many queen-breeders of the South, and will be a valuable help in Mrs. A.'s bee-yards.

The Van Deusen Foundation, as nearly all bee-keepers know, has flat bottoms to the cells. Heretofore the manufacturers have been putting it up in boxes holding 25 pounds each, but we learn from the "Review" that "another year it will be put up in smaller packages—as small as 6¼ pounds. Retailers are often called upon for small quantities, and the work of preparing it for shipment takes up a good share of the profits. The proposed plan will do away with this objection."

Tennessee Bee-Dealers.—One of our Colorado subscribers writes us as follows:

"Can you not induce some of the Tennessee apiarists to advertise in the 'Bee Journal.' I, as well as a number of my neighbors, want to buy bees for next May delivery, and I fail to see the advertisement of any one from there in the 'Bee Journal.' I hope to find the advertisements of a number of responsible bee-shippers in the 'Journal' soon, from the State of Tennessee."

We are ready at all times to receive the advertisements of reliable bee-shippers from Tennessee or any other State. Come on with your advertisements.

A Half-Dozen Mercers are shown on a page of "Gleanings" for Oct. 15th. They're a fine-looking group—father, mother, and four healthy-looking, handsome sons. It's a good "ad" for California climate. They all live in Ventura.

Stingless Bees in Costa Rica.—Mr. Richard Pfau, of San Jose, Costa Rica, in a late number of "Gleanings," wrote as follows about the stingless bees in Central America:

In Costa Rica there are about five known kinds of stingless bees; but only two of them are valued for their honey, and are kept for that purpose in rough logs hung down alongside the verandas. One sort, called "jicote" (he-co-tay), is a handsome bee, nearly of the size of a German bee. Its color is a brilliant black, with ~~five~~ very narrow golden bands, which, to be discovered, need close attention; hence, its general appearance, which, at first, seems to be a brownish yellow, as compared with the bee of Yucatan, which probably is nothing but the same jicote, common all over Central America.

The jicotes build circular combs, with small hexagonal cells for the brood, and large pockets of blackish wax for the



Stingless Queen, Drone and Worker.

honey, which is taken off once every year. I always keep some logs with jicotes in the midst of my apiary of Italians; but all my trials to get them to work in a more civilized fashion in my dovetailed hives proved useless; neither have I much hope that some day hybrids may result, as the queen of the jicotes is very distinct from her majesties of other races, her abdomen being a large snow-white ball, full of eggs.

The other sort of stingless bees, called "mariasca," is rather scarce, but celebrated here for its delicious honey, although to my taste it rather resembles Italian honey mixed with some syrup and plenty of water. The mariasca bee is exceedingly small—scarcely larger than the head of an Italian drone, and it is leather-colored. Although in appearance the mariasca seems to be very distinct from the jicote, its way of building brood-combs and honeybags is nearly identical, except that the wax is leather-colored, and everything has much smaller proportions.

That Texas Bee-Meeting at Beeville, on Dec. 27th and 28th, promises to be a notable event for Southern bee-keepers. Mrs. Atchley is making extensive preparations, and looks for a big crowd. Mr. F. A. Lockhart, of Lake George, N. Y., expects to be there, and also other prominent bee-folks of the North.

More Convention Echoes.—On page 521 we gave a few comments on the St. Joseph convention, and now comes our friend Emm Dee with some more in about the same strain—though probably less “strained” than were ours. Here they are:

EMM DEE IN CLOVER HONEY.

Can I ever forget the glories of that bee-convention? It was my first love (of the kind), and I confess to being softly smitten. Had I known that Bro. York had such a surprise in store for me, I could scarcely have trusted myself to its enjoyment. But what can you do when embarked on the voyage? It's cowardly to turn back. So I followed my guide, and feared no danger.

We shipped on board of one of Pullman's schooners, and away we went. On our way we took on at least two other passengers—one short and stout, the other lean and tall, and I was dramatically introduced to each. Now, I had heard of, and read much after the party of the first part, and when I heard Dr. Miller's name mentioned, and looked him square in the eye, thinks I: Young man, you're not the kind of a chap I thought you to be; you're not so tall, but better looking; you're not “stuck up,” as I expected, but a very agreeable companion, with a good open countenance (for pie!).

The six-footer I learned was Editor Hutchinson, and so clever was he that I actually occupied the same bunk with him the very first night. But, bless your heart, he wrapped himself up in those Pullman blankets, and so wound himself up in them that I—well, I got left, out in the cold!

But daylight came on apace, the gentle tones of the ebonized porter were abroad in that car, and I felt that the best thing I could do was to get up and rehabilitate myself in my modest attire, slip out to the wash-room, and let Dr. Miller, York and Hutchy snore away! And they did it to perfection. Barring a few loose nails and timbers of that car, I believe their united effort did little damage.

After early breakfast (which we did not have), we arrived in the city of Saint Joe-seph, Missouri, situate on the raging river of the name. We were escorted by a gentlemanly committee of bee-keepers to the convention hall, and it seems to me that in ten minutes every son and daughter in that select assembly knew each other as

if acquainted for years! Thinks I, Verily this is the right sort of welcome.

And then began a system of questioning that would have driven a Philadelphia lawyer out of his town and State. Besides wanting to know where we were from, they immediately inquired concerning our families—of bees. Whether the circle had multiplied much, and if much honey had been hatched this season, and if Whatshis-name's hive wasn't the dandiest in existence, and whether there was pollen enough scooped in to fill all the cells, and if the bee-bread was really an improvement on the baker's kind or not. As for me, I unhesitatingly replied in the affirmative to all these questions, recognizing that I was looked upon as the chief intelligence on these intricate subjects!

Well, by and by, pretty soon, up looms a man they called “President Abbott”—a very good looking, too; he gave a few raps on the table, and commanded order. Well, I swow! But then we sat down quite comfortably in great, big chairs, 'pears like stuffed with feather beds; and then the man that stood up laid down the law.

Up gets a tall, suggestive chap from Laclede, and down sits the other fellow. The Laclede brother, he 'lowed we'd come to hear about honey, and he didn't want any other kind of sweet'nin' in his'n. Then another pretty handsome feller from Canada, he had his say, and it was pretty good, too. Then the sisters present were asked their testimony, and they were mighty slick in giving it—why, say, to my mind they seemed to know a heap sight more than the men-folks!

Well, it ran along smooth enough, thirteen or seventeen trying to tell all about it at once, when, sudden-like, Father Root, who had been sitting alongside of a handsome sister all this while, got up and said he thought so, too. Only that he—he—well, I've forgotten his exact words, but his ideas were all right, though I didn't know what to make of his direct look at me when he said something about people not being just what they should be—or words to that effect! O I tell you, I got kinder spunky, but I didn't say much.

Then Dr. Miller he was elected to give us a hymn-tune, which he did, and he actually played the big music-box all by hisself! Then he gave us a Dutch solo, and after that he told us how nice the honey made

by the motbs was, and how king-bees could be turned into queens, or something like that. I think he got all mixed up on the subject, or maybe it was me that was just a trifle "off."

Now, what do you *think*? Not a soul in that convention asked *my* opinion in regard to those many and momentous questions! The slight sorter rankles in my bosom yet. Of course, a few of the more considerate availed themselves of my wise counsel regarding the proper food for bees, and as to the best time in the day to feed them—whether only morning and bed-time, or at noon, too. I was pleased to impart all the knowledge in my power!

But I am real glad I went to that bee-convention, if only for the pleasure of meeting the sweet sisters and big brothers. The nice blonde man from Canada told us folks what a grand time we could all have if we came to see him. So we voted to go there next year, and elected him President, so he could look out for nice accommodations. Maybe his house won't hold all of us, but Dr. Miller and I, and York and Hutchinson, can sleep up in the haymow, just as well as not.

Good bye, sisters, until we meet again.

EMM DEE.

Both are Asters.—Mr. Wm. S. Knox, of Dickeyville, Wis., writes as follows:

By this mail I send you samples of two honey-plants. Please name each, and tell their value as honey-producers. They grow mostly on places where the timber has been chopped off. Success to the "Old Reliable."

WM. S. KNOX.

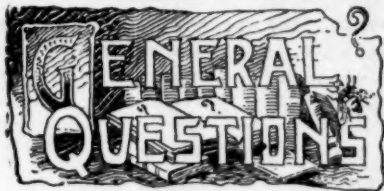
Prof. T. J. Burrill, of the University of Illinois, at Champaign, kindly replies to the above as follows:

These plants are both asters, and probably *Aster laevis* and *Aster carolinæ*, but it is impossible to be absolutely certain from the specimens in regard to the species. However, all asters are very much alike in regard to their honey value. I do not think this very great. Immense quantities of pollen are collected from them, and no doubt a fair amount of nectar.

The plant belongs to the sunflower family, of which there are an immense number of species, and among them some honey-plants.

T. J. BURRILL.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for \$1.40.



ANSWERED BY

DR. C. C. MILLER,
MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

The Hoffman Frame.

Please give me your opinion of the Hoffman frame. I notice Mr. Barnett Taylor condemns it in an article on page 272 of a March number of the "American Bee Journal" for 1894. I want to use the self-spacing frame in full brood-chamber, if there is no better.

Gaylord, Va.

E. E. A.

ANSWER—Referring to the page you mention, it is easily seen that Mr. B. Taylor is quite positive in his condemnation of the Hoffman frame, and he is a man whose opinions I respect. He does not say why he condemns them, but if I understand him correctly, he condemns them because he likes the kind he is using better, and I suspect it is on account of the matter of ease or difficulty in handling.

I have had considerable experience with the Hoffman frames, as well as with several other kinds. Exact spacing seemed to be a thing out of the question with my old, loose-hanging frames, and among other self-spacing frames I tried the Hoffman. They gave exact spacing against which there could be no criticism, but after being in use for some time I began to dread having to open a hive containing them. There was so much prying and pulling to get out the dummy before getting out the first frame, that the old, loose frames seemed ever so much nicer to handle. The

whole thing was wedged up tight, all was glued tight, glue gradually accumulated, making everything tighter, and making my face redder each time I opened one of the hives.

Then I got some of the Hoffman frames with the V edge, against which edge I was strongly prejudiced, but after a full year's use, I must say that they are very nice and easy to handle. I don't wedge them at all, just push the frames tight together each time, and there's no trouble about picking out the dummy or taking out the first frame by simply pushing the dummy back. So I condemn the old Hoffmans, but I like the new ones better than anything I have tried. I would like still better to have no chance for glue.

Prevention of Granulation.

In a late issue of the "American Bee Journal" Mr. Doolittle gave directions for making a winter feed that will not granulate in the cells—5 pounds of honey, 30 pounds of sugar, and 15 pounds of water, I believe. Will granulated honey, liquefied as usually directed, answer for the purpose? E. B.

ANSWER.—I think the granulated honey will be all right.

Two Colonies in a Hive.

I am satisfied with my success in bee-keeping this year. I think I have done fairly well for a novice. I started last spring with two colonies of blacks in box-hives, and increased to six by swarming—all in frame hives. I got about 30 pounds of honey in transferring. The two colonies got no surplus, as "we" were swarming in the honey-flow, which was basswood this year. My neighbor, an experienced bee-keeper, started last spring with 3 colonies of Italians, and increased to 11 by dividing, and took 130 pounds of comb honey, and will not have to feed for winter. I have fed 15 pounds of syrup to two of my weakest colonies, and am through feeding except the hybrids.

I introduced two Italian queens last summer, one was received all right, and the other, after looking thoroughly for her six or seven times, I found a black queen in possession. I am sure there

were no queen-cells or queen in the hive when I introduced her in the cage. I think she must have come from some other hive. It seems that such things do occur sometimes, as the above-mentioned neighbor in introducing some Italian queens on the combs years ago, when there were no other Italians in this part of the country, accidentally let one go, and after awhile found her in a colony of blacks of his.

What would be the probable result of wintering two small colonies in one hive, if a frame covered with screen-wire, and fitted so that no bees could pass, were placed between them? Would they likely be restless, or quiet, and like a large colony? The object would be economy of room, heat and feed, as I believe it is claimed that a large colony will winter with less feed in proportion to its size than a small one.

Belleville, Wis., Oct. 22.

Ans.—I've wintered many small colonies two in a hive, with a $\frac{3}{8}$ -inch board between them, and it works well. Whether wire-cloth would work the same I don't know, but I am inclined to think it would be all right. But you can't be sure till you try.

Changing Size of Hive-Entrance.

Should the hive-entrance always be the same size? If not, when should the changes be made? MISSOURI.

ANSWER.—As a matter of actual practice, I think most bee-keepers leave the entrance the same the year round, although those who winter in cellars and who do not give upward ventilation prefer to have the entrance much enlarged while in the cellar, even to taking away the bottom-board entirely. If there is any time when it seems profitable to lessen the entrance, I should say it is when first flights begin in spring, so as to save the heat as much as possible for breeding purposes.

Uniting Colonies—Moth-Proof Bees.

1. I have some more questions to ask. This week I united some of my weak colonies and caged one of the queens, and left the other free in the hive. What bothers me is, in one hive that contains two of the small colonies they

have a queen at liberty, one queen in a cage set between the frames, and queen-cells with an egg in one of the cells. When I looked at it yesterday, it was nearly ready to be capped over. What will be the outcome of this? Will the bees kill the queen that is at liberty in the hive, or not? I would not like to lose her as it is one I value highly.

2. By the way, you said I should keep pure Italian bees to keep out moth-worms. All my bees are the best Italians I can get, from such as Doolittle and Mrs. Atchley. If they are "no good," then I am sure I don't know where to get any that are.

3. One thing I have noticed, that the bees that I united fought a great deal and killed a great many. Now wouldn't it be better to unite them just as I am about to put them in the cellar for winter, or would you do it now, and let them fight it out until they settle down, as the one that I united has done?

Aurora, Ill., Oct. 18.

L. S.

ANSWERS.—1. What made you leave a caged and uncaged queen in the hive? If you caged a queen so the bees would not hurt her, you were lessening her chances by allowing another queen in the hive. I have had bees kill their own queen for no other reason, I think, than that I had caged another queen in the hive to be kept till I needed her. So the caged queen would make the free queen's chances of safety less. On the other hand, if the bees should not kill the free queen, then the caged queen would stand a poor show when liberated. If you want one of the queens saved, kill the other. If a queen is caged in a hive, it is the common thing for the bees to start queen-cells, and it seems some of the bees friendly to your caged queen acted on that plan. If not too late, the best thing you can do is to destroy the queen-cells, remove the poorer queen, and cage for a time the other queen, if you think that is necessary for safety.

2. It seems to me the source from which your Italians come is all right, and unless there is a predominance of other blood worked in, the moths ought to be held at bay.

3. I think I would a little rather have the uniting done before going in the cel-

lar. Following up some one of the plans lately given in the "Bee Journal," there ought not to be much fighting. Smoke 'em like sixty if they start fighting.

Pollen in Early Spring.

I am in a quandary again regarding my bees and know of no better source to go to for information than the "Old Reliable."

I was out bee-hunting the other day, and came to a bee-tree that had lately been cut and robbed of all the honey, leaving a good-sized colony of hybrids to perish, as it is too late in the season to get another store for winter; and when I happened to see that the queen was all right, I concluded to take them home and feed them on sugar syrup and see how I came out next fall with my investment.

I put them on 3 Langstroth frames of old combs and 2 of foundation. I made a feeder by tacking a piece of wood separator on each side of a Langstroth brood-frame, and put in a bevel-edged strip of wood for a floater to keep the bees from drowning. This they will empty in about three hours, and I should think it would hold three or four pounds of syrup. It is about $4 \times 17 \times \frac{1}{2}$ inches, inside measure. I place it at one side of the combs, and it seems to answer the purpose well.

Now, is it necessary for them to have pollen for brood-rearing next spring before pollen comes (I winter bees in the cellar)? If so, can I feed anything to supply it? If so, what and how? I looked in all my strong colonies for help, but pollen is scarce, and unless it is in the bottom of the cells and covered with honey, there is none to spare.

Bellevue, Wis.

SUB.

ANSWER.—They will rear no brood next spring without pollen. You might swap one or two of their frames of stores for one or two from the other colonies, for most likely you would thus give them pollen, although you might not see the pollen. Or, you can wait till next spring, and then when the honey is eaten out you'll have no trouble in finding frames of pollen in the other hives, from which you can draw.

Have You Read the wonderful Premium offers on page 578?



CONDUCTED BY
MRS. JENNIE ATCHLEY.
 BEEVILLE, TEXAS.

Getting Along With Cross People.

MRS. ATCHLEY:—As we Southern beekeepers have now learned to look to you for advice on matters pertaining to bees, I wish to ask you what is the best way to get along with people that are always cross and trying to find something to accuse the bees of being a damage? It seems that some people get angry when everything doesn't go to their liking. Please answer in the "American Bee Journal."

SUBSCRIBER.

Friend Subscriber, whoever you are, I will say that you have me in a tight place, to answer or give advice, and without more of the particulars it would be hard to prescribe for your case. However, you ought to know whether or not your bees are a real nuisance or damage to your neighbors. If so, I would remedy the matter if I had to move my bees, for I do love peace. Now, if your bees bother your neighbors at preserve-making time, I would furnish them with mosquito-bar or wire-cloth enough to cover or enclose the room, etc.; and, besides, take them a mess of honey occasionally, and this will usually sweeten people unless they are a lemon straight.

If your bees bother grapes, or whatever they do to annoy neighbors, try to remedy the evil. I've had hard feelings from people, or they thought hard of me, because my bees visited their stock-watering troughs, but I have *always*, so far, made matters right and satisfactory in some way.

Please bear with me a little right here. One of the worst things that has come up in my rounds was in locating out-apiaries. I almost always put my bees at or near some residence, and I have never yet, that I remember, had any one to make a charge for my bees being on their premises. Often I have asked

what they would charge me, and the reply was: "Nothing at all." I would say, "Well, I will give you some honey to eat, anyway." These people knew nothing of bees, and thought where there were bees there was honey. If the season would open up badly, and continue so for a time, and I had no honey to offer them, I would feel ashamed to visit the yards, and actually I have bought honey and given it to people, when they thought it came from the bees at their place. And, oh, how it would please them! I would rather pay a moderate price for the use of space than to have it free—I would get off cheaper. I nearly always leave a colony of bees when I move the bees away.

Now, back to your questions, and I will close by giving my experience with ugly neighbors. It is this:

There are some things in this world not to our liking, which we cannot change. Much of our happiness, as well as usefulness, depends upon our ability to adapt ourselves patiently to disagreeable and troublesome things which are inevitable and incurable. The river cannot remove the mountain, so it gracefully flows around it; so we must patiently go around many things which we cannot remove.

This principle applies to our relations and dealings with the people about us. Some of them are uncongenial, disagreeable, provoking. Strive and fret ourselves as we will, we cannot change them. We must accept their peculiarities, and even their faults as inevitable, and adapt ourselves to them. People who have grown up crooked, are hard to straighten. We must learn to help people, and love them, and be happy in their society in spite of their peculiarities and defects.

Now, I trust that you may get some ideas out of this that will enable you to study those cross neighbors, and make them your friends.

JENNIE ATCHLEY.

Buffalo Clover.

MRS. ATCHLEY:—I see that you name buffalo clover as a honey-plant of Texas. Now I always thought so, too, but I have kept bees for three years, and for two years as a specialty, and have watched it closely, and I have not seen a single bee at work on buffalo clover. Now what I wish to know is, do bees work on it in some localities, of your

own knowledge? Please answer in the "American Bee Journal."

We have a plant in this county (Hill) of considerable importance as a honey-plant, that I would like to know the name of. It is a bushy weed, small leaf, grows from 12 to 18 inches high, and blooms from May 1st to 15th. The blooms are constructed something like the sunflower, only the center is more round, and as large as a half dollar. The outside row of petals are dark red. If you can tell what it is, please do so. If not, can you give me the address of some one who can tell me? I will send a sample to some botanist next spring, if necessary, and notify you of the result.

Abbott, Tex.

J. D. PROSISE.

Friend P., I have had splendid yields from buffalo clover in Lampasas county, where I kept bees in 1884-85-86-87, and it bloomed there in May, and gave a fair crop, even in the driest year we had there during the three years' drouth. I do not know whether it furnishes honey only in certain localities or not, but I had supposed it furnished honey wherever it grows. Who else has noticed this clover in their localities? Buffalo clover belongs to the mint family, as do all plants with a square stalk.

Prof. A. J. Cook, of Claremont, Calif., can tell you the name of the other plant.

JENNIE ATCHLEY.

About Royal Jelly.

1. How long will royal jelly keep good, out of the cells?

2. When it gets thick and hard, can it be used?

3. How much do you use in a cell?

Alliance, Tex

H. L. BOLTON.

Friend B., I will answer as best I can.

1. I never tried how long it will keep, but it will soon become too tough and hard to be used for grafting.

2. I never try to use it when it gets old or turned yellow. I prefer to use jelly as thin as I can get it. Still, we often mix the thin and thick jelly together, when it is scarce, and it works all right. We do not now use the jelly plan from queen-cells—we move the larva, jelly and all, together, which is much better.

3. Only a small quantity is sufficient—say what would lay on the point of a small pen-knife. JENNIE ATCHLEY.



Bees Infuriated—What to Do.

Query 947.—1. What would you do, suppose the bees in your apiary had become unmanageable, by careless handling, accident, or otherwise, so that they would sting everything in sight?

2. Have you ever known such a state of affairs in your experience?—Illinois.

1. Run. 2. No.—P. H. ELWOOD.

1. I don't know. 2. No.—J. M. HAMBAUGH.

1. Subdue them with smoke or water. 2. No.—H. D. CUTTING.

1. I would probably feel like swearing. 2. No.—W. G. LARRABEE.

1. I would probably wait until they got over their fit. 2. No.—C. C. MILLER.

1. I would keep out of sight. 2. Occasionally, through carelessness.—Mrs. L. HARRISON.

1. All would depend upon what was the trouble. 2. I never had any bees that were unmanageable from any cause.—E. FRANCE.

I have never had such a case. I should use smoke, and if that failed, use a bee-tent, which always subdues even the most vicious.—A. J. COOK.

1. I would let them alone until they became quiet. 2. I have had a case or two of that kind with single colonies, but their fury was of short duration.—M. MAHIN.

1. Leave them severely alone for two weeks, and they will forget all about it. If not more than 100 to 200 bees did the stinging, kill them with a paddle at once.—G. M. DOOLITTLE.

Leave them alone as much as possible, and when handling them, smoke thoroughly. Moving the hives might do some good, as some of the old bees would be lost.—DADANT & SON.

1. I would give an upper story with wire or cloth top, then shower them all in and close the entrance with wire-cloth in the day time, and open it at dark. Keep the hive well shaded, and the en-

trance darkened during the day. Adjust all entrances to about four inches, or less if that much is not needed for free passage of the bees in and out. 2. Not in my own apiary.—**MRS. J. N. HEATER.**

1 and 2. I have never had such an experience, and can't imagine how such a state of things should arise. In such case, I should either kill the whole colony, or re-queen it.—**J. E. POND.**

1. I'd keep out of their reach, and send the children in the house. A big smudge might help. 2. No. Something is wrong somewhere when such a state of affairs exists.—**EUGENE SECOR.**

1. Stop "careless handling;" guard against "accidents;" look out for the "otherwise;" feed each colony late in the evening—if their pasture is very poor. 2. Not in any well managed apiary.—**J. P. H. BROWN.**

1. I would get everything out of "sight" as rapidly as I could until the bees cooled down. 2. Yes; it was caused by the jarring of the earth made by the use of a road scraper in the neighborhood of the apiary.—**R. L. TAYLOR.**

1. I should use the smoker and the fountain pump the best I knew how. If salty water is used in the pump, it will help to secure quiet. Of course the best plan is not to provoke such a condition of things by carelessness. 2. Yes.—**EMERSON T. ABBOTT.**

1. Keep away from them as far as possible, until they get over it. Use plenty of smoke. Find out if possible which colonies are doing the stinging—usually there are not many—and see that they are subdued. 2. To a limited extent.—**J. A. GREEN.**

As I have never known bees to get that way, I am of the mind to answer as the young physician did on examination: "What would you first do in case a man had been blown up by an explosion?" He replied, "Would wait until he came down."—**JAS. A. STONE.**

1. If near night let them severely alone, and after it has become dusk, and they have quieted down—remedy the cause. If early in the day, I would contract entrances to every hive, and introduce a little "feed" into the inside of the disturbed colonies; if necessary, cover them up entirely.—**W. M. BARNUM.**

1. Prevention is better than a cure, but if the thing has happened, and they are endangering the lives of animals and folks, terrify them with smoke. They will respect this when they will nothing else. Get so much smoke

around them that they can't recognize themselves or the hives. A bee is not likely to sting unless it does it soon after leaving the hive. 2. Yes, I have known it, and known of it to such an extent that it would be hard for me to fix the distance from dwelling-houses and highways at which it would be absolutely safe to establish large apiaries.—**S. I. FREEBORN.**

1. An ounce of prevention is worth more than a pound of cure in such case, but as such a condition may happen, it is well to consider what is best to do. I should lose no time in getting the smoker going, and give every colony showing unusual activity a good dose of smoke. 2. No.—**C. H. DIBBERN.**

1. Leave them entirely alone for a few days until they forget the cause of their irritation. Then handle them gently until they get all right. 2. Yes, nearly every season my bees, or rather a part of them, at times, get cross and handle badly. But in a general way I have no trouble with them.—**G. W. DEMARKE.**

I would let them get over their excitement by keeping all sweets out of their reach about the apiary. It is never safe in a large apiary to leave honey exposed except during a good honey-flow. To stop their stinging, smoke each hive with tobacco smoke just before dusk. 2. I have had them to sting everything in sight, but tobacco quieted them.—**G. L. TINKER.**

1. I would begin at once to handle in a careful way, using smoke so as to keep the bees always subdued. I would never leave a colony I was working with until it was thoroughly subdued. I would then re-queen as soon as possible with gentle Italian queens. 2. Yes, I have known bees to become so cross from bad handling that they drove everything to shelter.—**B. TAYLOR.**

1. I would light the smoker, and go into them and right all wrongs as quickly as possible. In case of accident, clear things up quicker, and let them quiet down. 2. I have many times had accidents—hives bursted, etc., also bad cases of robbing by bad management, but I have always as yet managed them. I know it tries one's patience in such cases, but I think we should always try to remedy the evil in as quiet manner as possible.—**MRS. JENNIE ATCHLEY.**

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PROCEEDINGS
OF THE
Twenty-Fifth Annual Meeting
OF THE
NORTH AMERICAN
BEE-KEEPERS' ASSOCIATION.

BY FRANK BENTON, SEC.

[Continued from page 530.]

The following discussion took place after the reading of Mr. Rouse's essay on page 530, entitled,

Profits in Bee-Keeping.

Dr. C. C. Miller—I have not sold my crop yet ($1\frac{1}{2}$ ounces per colony), so I don't know what the profits will be.

A. I. Root—Since starting for this convention I have heard a great many reports from bee-keepers, and we have had correspondence with many other bee-keepers, but I have heard very little said which will lead one to believe that there are very large profits for the bee-keepers in the United States. I remember a supply-dealer in Ohio remarking: "Say, Mr. Root, there's just one question I want you to answer: Do you think bees are ever going to pay one as they used to pay?" If I am not mistaken, a good many of the friends are asking if bees are going to pay again as they used to pay. Well, before you get discouraged and join in with the ranks of those who do not think bees are going to pay, let me say a few words to you. There are some people who say that grocery-keeping don't pay, and there have been people who said farming did not pay 50 years ago. I cannot remember 50 years ago, but I can remember *nearly* 50. The world has gone on with its ups and downs. If bee-keeping does not pay, what will? Is it the trouble of the season, altogether, or the bee-keeper? There is a young man within two miles of our apiary, having 300 or 400 colonies. I ran out that way on my wheel a few weeks ago, and Ernest told me I had better go and see him. We had quite a little talk, and, to my surprise, he had a crop of honey last year, and he said, "I have had a good crop of honey ever since I have kept bees." Now you may say he had a good locality, but he has not—no better than others. We have pretty good basswood and willow. He is not in a very good locality, but he

has lots of faith in the great God above. My friend Grimm, there, looks happy. The Grimms have always made money, and always got honey, I guess. Now friends, there have been some bad seasons. We have been traveling in Missouri, and while I have been travelling I have been looking over your State, and I have been sorry not only for the bee-keepers, but for the farmer, and when we feel sorry for the farmers we ought to feel sorry for the grocers, and when we feel sorry for the grocers we have to feel sorry for other people, and so it goes on. Some of the hotel people charge 75 cents for breakfast. I do not go there, and so I feel sorry for them, too. I feel certain that there are some places in Missouri where they have fair crops, and I have been told in some places that they did not get any honey. Now I wish all of these local things would come out. I do not want to be all the time looking on the dark side, but I want to look on the hopeful side. I know that there are some good times coming even for the bee-keepers.

Dr. Miller—Mr. Root always, under the pretense of encouraging us, says some discouraging things. There may be a man right by you who has a good crop of honey while you have none. This is as much as saying that you failed because you have not got faith in God. Now, there may be something in that, but I do not think that is the whole cause of the failure. There is a good deal in that, that others are having crops, but it is not true that some of us fail because we have not got faith. I know what I know, if I don't know much, and I do know that I have got faith in God, and this year I have had a bitter failure. It is true that not over 20 miles from me I spent a night with a man who had a fair crop. There are those things going on all about us. I do believe this: If we do not know of any reason why we are having these failures, we have the right to expect that, in the course of time, things will come about so that the crop will come to my place, and if it does not come this year, perhaps it will come the next. If it pinches me so hard that I have to do something else to make a living, I will do it. I am not discouraged. I am not working for that. This last year has been the happiest for my whole life. Every year is happier than the one before it, and I am expecting it to keep on as the days come, and I will be happier every year. We may expect the honey crops to come back any time. I expect the crops of honey to come back again.

C. Grimm—I will admit that there is not as much profit in bee-keeping as there was years ago. There was a time when bees could be sold for \$50 a colony, and honey, that is, the comb honey, sold for 50 cents, and extracted, for about the same. And my brother sold queens from Italy at \$20 apiece. There was then a good deal of profit, and my brother made in bee-keeping about \$50,000 clear money. There was no question about it. He had it when he died. I made a little money, but I was not "in it" as he was. We shipped honey by the carload to New York, two or three carloads at once, but we lost money on that. At the present time, when you have to sell a good colony of bees for \$5 in the spring, it is rather low, and honey at a shilling a pound is not much money. I am not discouraged. My wife has told me a good many times to give up bees, but I don't intend to do it. I will keep it up all my life. I think it is a good business.

R. F. Holtermann—I think that as Mr. Root and Dr. Miller said, there are conditions under our control, and others not under our control, in connection with our failures. It appears to me that every season we find more and more that there is a premium on understanding our business, and in using that understanding in the right way. One man cannot do another man's thinking. In the past season I have gone through Ontario, and I do not know how the season has been with you, but with us the season has been good. The bees built up strong. Then we had wet and cold weather so that in every instance the queen stopped laying entirely, and then the drones were about killed off. In a season like that I found that those men who practiced stimulative feeding to keep the queen laying, had very strong colonies, and secured far better crops than the men who did not do it. I am one of those men who say I do not believe in stimulative feeding, but this last season was an extraordinary one, and under those conditions it was necessary. The difficulties are greater at the present time, but we are still able to secure and make a living. We find people in all directions claiming that one thing does not pay, and another thing does not pay, and that it does not pay to do this or that, and go from one thing to another. What little experience I have had, I think it pays to stick to one thing. The men who were careful in bringing their colonies through the winter, and watched out in the spring, are going to fare better than if we had had

a really good spring. In regard to our profits, we are making a great mistake in trying to enlarge our markets. We should produce a good article and put it before the public in the right way, and we can increase the consumption of honey in our own territory very considerably, and before I go away I hope I may show you a copy of a paper that devoted a whole page to bees and honey in the Toronto Exposition. If that was done throughout the country, we would find a greater sale for our honey, and better prices, and we could increase our markets at home.

Spring Stimulative Feeding—Breeding for Color.

Dr. Miller—I would like to ask Mr. Holtermann how much he thinks was the advantage of stimulative feeding last spring.

Mr. Holtermann—Before I answer that question, I would like to say I am one of those people who have condemned stimulative feeding, but under these conditions I am sure stimulative feeding gave fully 30 per cent. more in honey. I don't know exactly, but I think there is that much of a gain. The weather was cold continuously for three weeks every day, and wet; there was no honey coming in, and the colonies would probably have starved unless attended to in that way. There was very little honey and much brood, and not much uncapped stores. This continued for at least two or three weeks. The queen ceased depositing eggs, and in this condition stimulative feeding was of great advantage.

F. H. Richardson—What flowers were your bees gathering from?

Mr. Holtermann—The early flowers, of course—clover. I am one of those who have taken the stand that I want to get all the bees I can before the early bloom comes. Some say that they do not want to get bees strong before the honey comes. That is absurd.

Mr. Root—Mr. H. R. Boardman told me he was pretty sure he would have no crop at all unless he fed his bees with sugar syrup until up to the honey-flow. He would have the brood-chamber well filled so that all surplus honey that came must go into the sections. He crowded his brood-combs so full of feed that the bees had no other place to put the surplus. He had about two tons, mostly from basswood, and in his opinion if he had not fed them as he did, he would not have had any crop at all.

Mr. Richardson—Stimulative feeding

under certain circumstances and conditions will undoubtedly pay so far as my experience goes, but it is like other things connected with our occupation, that is, it is rather risky. Sometimes it will pay, and sometimes it will not pay. Sometimes you feed and build colonies up strong until about white clover time, and then you have no crop, and the bees will undoubtedly starve unless you look after them pretty closely. What I am keeping bees for, and what I am in the bee-business for, is the dollars and cents, and I expect to stay in it. I have 160 acres of corn, meadow, etc., and I would hate to tell you what I have got off of it. I am not going to throw up farming just because I do not get anything at all, and I am not going to throw up bees because I do not get any honey. I do not believe any amount of faith will put honey in the pail when it is not there. I have bees that are going to get honey if there is any. I have not had any honey-flow since I have been in bee-keeping. But I am going to build up my business just as fast as I can.

Frank Benton—I have contended for very many years that stimulative feeding is at the bottom of all success in bee-keeping. But it is only with myself that I have contended—have tried to consider the matter from all standpoints and subject it to careful experiment, because there have been so many against me, some of them especially being those with whom a controversy once entered upon would be never-ending. I believe that to obtain the best results it is necessary to stimulate whenever bees are not gathering honey and yet can fly out for exercise. I would have a prolific race of bees, and I would have the choicest and most prolific queens of that race. A prolific queen is the cornerstone of success. Whenever bees are not gathering honey, and the winds are raw and cold, I would still stimulate them, but this can be carried too far. Whenever in the middle of the season an important yield of honey is anticipated it is easy by stimulative feeding to get the hives crowded with bees ready for that harvest. After that it may, or, according to circumstances, it may not be profitable to stimulate them. If no honey comes in for a time, so that brood-rearing ceases, and if it is still possible to rear workers in time for a fall flow, by all means resort to stimulative feeding if the time can be found to attend to it. Or if the colonies have become reduced too much during the last honey-flow, the remaining bees being mainly old ones, it will pay to stimulate some even though

no fall flow can be expected. They will be in better condition for winter. To illustrate: the past summer from about the first week of July to the end of August my bees brought in no honey. My time would not permit me to go all over them and stimulate them regularly, but it would have paid me 100 per cent. to have done so. They had honey in their combs, in fact many of them much more than they needed, for I had been otherwise too busy to remove all they might have spared, knowing I would not have time to feed regularly. Yet I know as the result of repeated experiments along this line that it would have been a profitable undertaking to have stimulated brood-rearing by frequent feeding. What comes in daily is, in general, during mild or warm weather, what regulates the amount of brood a given queen will produce. Few colonies will draw much on their sealed stores to keep up brood-rearing. If the workers have passed through a harvest, they dwindle rapidly after that, and their places must be supplied by others, else the colony is in no condition for another honey-harvest that season nor for the winter, especially if they have much time to fly out and get reduced before cold weather commences. In September we had a moderate yield (chiefly from wild asters), and just those colonies which had been stimulated occasionally during the long summer drouth and honey-dearth, stored more than the others—many of them four or five times as much. They were so much stronger in bees they could send a force into the fields. I am sure the immediate return in honey from my bees would have been greater had I not increased my colonies beyond such a number as I could have stimulated regularly during the summer. But I have shown my faith in the future profitability of bee-keeping by increasing my apiary until it numbers 140 colonies. In this connection I wish to make one other statement. I have kept bees from my childhood, and for more than 20 years have engaged in this business exclusively; my experience has, moreover, been in several different States of the Union, and in a number of foreign countries under conditions of climate and pasturage which have differed very widely from each other, having been located in tropical, again in sub-tropical, northern and Alpine regions, yet when my colonies have been in excellent condition—such as they can always be kept up to by feeding at the proper time—I never yet experienced a season when they did not gather enough to last all

winter, and rarely one which gave no surplus. My experience is, that, by paying very close attention to the selection of queens, and by having an exact knowledge of what I might anticipate in the way of blossoms which ordinarily yield honey, and by having the bees there whether any great harvest came or not, in the course of the year they have always found a yield; and whenever I fail to stimulate part of my colonies, and the natural sources fail to secrete enough at all times to keep brood-rearing going on from spring until fall, the difference in the condition of the colonies, standing side by side, seems to be in favor of those I have stimulated, by 50 per cent., hence I believe that on this account alone stimulative feeding pays.

Mr. Richardson—I would like to know what we put in the honey-buckets: It is honey, isn't it? I have been riding around to see some of those queen-breeders, and they have led me to believe that it was "color" that I wanted to put into the honey-buckets. I would write to this one and say, "I want a queen; what have you got?" And they would reply, "I have got some beautiful queens that are all yellow." They do not say whether they get any honey or not, but they say that the queens are all yellow. They say if you are not satisfied with that, you don't have to buy. I don't care whether a bee is as black as my hat. I have had queens from bee-dealers that I would not give a cent for a thousand of them. They were of no use. I have not got a black bee in my apiary, and I never have had. I don't want to be understood that I want black bees, because I don't, but what I do want is a bee that will get the honey when there is any honey to get. You give me a queen that will give me 180 or 190 pounds of honey every year, and I will stand it if their sting is a yard long.

Dr. Miller—So far as we have gotten, it would seem to prevail either that stimulative feeding is a good thing all of the time, or that it is a good thing some of the time. I would like to know something about this matter. I would like to have those who don't approve of stimulative feeding, tell us the harm in it. Tell us the bad time to stimulate, and the harm in it.

Pres. E. T. Abbott—I would like to say something about those yellow bees. The tendency to yellow is sporty. Every one that has raised chickens, for instance the Golden Wyandottes, where the color is yellow and black, knows there is a tendency to, extreme yellow-

ness or to extreme blackness. This splashing of yellow denotes sporty chickens. It simply indicates that it is a mongrel. You mix Cyprian blood with Italian blood, and you will get yellow bees for four generations. If I may be allowed to use the expression, we want the "feathers" of the bee distinctly marked, the same as in the chicken. It is a mistaken idea that all yellow bees are sports, and not good breeders, but some of the queen-breeders have got the idea that the bees should be yellow all over, and that is all that is necessary.

Dr. Miller—Let me ask you: Suppose you have Italian bees which you know are pure, and there are nothing but pure Italian bees in your locality, I would like to know if you go on breeding from these alone what will be the tendency in regard to the color. Will they stay the same?

Mr. Abbott—The tendency of imported bees is to become lighter all the time. Every generation will make them a little lighter, but the markings will be the same. The color would be lighter, but there would be no change in the markings.

Dr. Miller—I would like to have an answer to my other question. Some say that stimulative feeding is a good thing, and others say that it is not. I would like to know how that is.

Mr. Holtermann—I can answer that, I think. It is objectionable at all times, possibly with a few exceptions. There are some bees after the basswood flow that do not get anything, and as the bees are getting old, it is a good thing to stimulate them to get them to care for the brood. I don't think it is a good thing to stimulate them early in the season, because they get too much brood in the hives, and unless the hives are protected when cold weather comes along, the brood will chill, and harm is done in this case; but one man cannot judge for another, and in my locality the bees get enough naturally to keep the queen laying as rapidly as the bees are able to take care of the brood. Just before the cold spell came on, the bees got a good deal from the fruit-bloom, and they were assisted very much, while others were not. My hives were clogged with bees, and if I were to stimulate them I would clog the brood-chamber.

Mr. Richardson—Now in regard to that color question. I was talking to a queen-breeder the other day, and I said to him, "I want you to answer a question about these bees. You have been breeding them, and I want to know just what you think of them, and he says,

"Well, I will tell you, they are not much good, they are too short-lived."

John Wier—In regard to those yellow bees. I have some of them in my apiary, and they have secured upwards of 50 pounds per colony, and the yellow bees have done the very best for me this year, and have done the best on red clover, better than any other bees. I have yellow, three-banded, and black bees, and I think my yellow bees have done the very best this year.

J. Schunacher—I have been handling Italian bees since 1866, when I reared my first Italian queen. I sent for a 5-banded queen seven or eight years ago. The first one I got I reared queens from, and they were 5-banded. The yellow bees are better workers by one-third, and they are longer-lived and gentler. I reared about 50 queens last year, and about 25 this year, and I was sorry that it was not so that I could rear more. I got some that did not give satisfaction, but I would not give them up for the 3-banded or the common Italians. I prefer them over all others.

Mr. Richardson—There is just as much difference in bees as there is in anything else. I can get 3-banded queens that I would not have on my place, and I can get other 3-banded queens that are worth \$10 of my money, and I would rather pay \$5 for a queen and know what I am getting than to pay 75 cents and have to take a queen that is bred altogether for color regardless of everything else. I would like to hear from some who are not queen-breeders, and who have used both kinds.

The convention then adjourned till 2 p.m.

(Continued on page 622.)

Those New Subscribers, that you have long been thinking of getting, are very likely ready now to give you their names. You know that besides "throwing in" the numbers for the rest of this year to new subscribers for 1895, we also give each one of them a free copy of the 160-page book, "Bees and Honey." Yes, and we will give you a premium for getting the new subscribers, as you will see on page 578. Better at once "get after" those bee-keeping friends of yours, and secure their subscriptions, so you can send it with your own renewal before the end of December. To double the present list of readers of the "American Bee Journal" will mean more than a doubly better paper for all. We can guarantee that. If each subscriber sends only one new name, the thing will be done. Will you do it?

Have You Read page 578 yet?

CONVENTION DIRECTORY.

Time and place of meeting.

1894.
Nov. 10.—Western Washington, at Tacoma.
G. D. Littooy, Sec., Tacoma, Wash.
Nov. 13, 14.—Illinois State, at Springfield, Ill.
Jas. A. Stone, Sec., Bradfordton, Ill.
Nov. 14, 15.—S.W. Wisconsin, at Montford, Wis.
A. A. Arms, Sec., Hurlbut, Wis.
Nov. 21, 22.—N.E. O. and N.W. Pa., at Corry, Pa.
Geo. Spitzer, Sec., Mosiertown, Pa.
Dec. 5.—Central California, at Hanford.
J. F. Flory, Sec., Lemoore, Calif.
Dec. 6.—Carolina, at Charlotte, N. C.
A. L. Beach, Sec., Steel Creek, N. C.
Dec. 18, 19.—Northern Illinois, at Rockford, Ill.
B. Kennedy, Sec., New Milford, Ill.
1895.
Jan. 9.—Indiana State, at Indianapolis, Ind.
Walter S. Ponder, Pres., Indianapolis, Ind.
Jan. 21, 22.—Colorado State, at Denver, Colo.
H. Knight, Sec., Littleton, Colo.
Jan. 28.—Venango Co., at Franklin, Pa.
C. S. Pizer, Sec., Franklin, Pa.
Jan. 30, 31.—Vermont, at Middlebury, Vt.
H. W. Scott, Sec., Barre, Vt.
Feb. 8, 9.—Wisconsin, at Madison, Wis.
J. W. Vance, Cor. Sec., Madison, Wis.
—.—North American, at Toronto, Can.
Frank Benton, Sec., U. S. Dept. Agriculture,
Washington, D. C.

In order to have this table complete. Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

OFFICERS FOR 1895.

PRES.—R. F. Holtermann.....Brantford, Ont.
VICE-PRES.—L. D. Stillson.....York, Nebr.
SECRETARY.—W. Z. Hutchinson.....Flint, Mich.
TREASURER.—J. T. Calvert.....Medina, Ohio.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

Illinois Convention Reports.—

The Illinois State Bee-Keepers' Association still have a good many copies of their Second Annual Report on hand, and no postage to send them out. Any one sending eight cents in stamps to pay postage and wrapping, will receive a copy of same by mail; or seven cents in stamps will pay for a copy of the First Annual Report, if any one desires it. Address, Jas. A. Stone, Sec., Bradfordton, Ill.



DEEP FRAMES VS. STORIFYING.

A Possible Compromise Between Eight and Ten Frame Hives. Locality Not Enough Considered.

BY F. L. THOMPSON.

On page 367 of "Gleanings," the editor suggested increasing the capacity of the 8-frame hive when desired by adding another 8-frame story. I tried the scheme on about a dozen colonies the past season, adding the additional stories about May 1st. At the opening of the honey-flow more than half had considerably more brood than they could have had in a single 8-frame story. One had 12 frames of brood, one 11, and two or three 10, while the average could not have been less than 7, and was probably more. But such hives are very cumbersome to look into, or to handle in any way as a whole. Storifying with half-depth frames throughout would be better.

I experienced one objection to storifying, however, which I have never seen stated in print. In raising up an upper story, I broke open as fine a queen-cell as I ever saw, which had been built so as to be fastened to frames in both stories, I found the queen failing, and not another cell in the hive. Later another cell was started, and a queen reared, but egg-laying was suspended for some time, and the colony is not now so strong.

These colonies were given work to do in building brood-combs by inserting empty frames after the flow had commenced. I do not see how they could profitably be used for comb honey. The average capacity of a queen, when the flow is not too early, may exceed that of an 8-frame chamber, but cannot attain to a 16-frame one. Some of the crop would have to be in the form of extracted honey, and the bees would be loth to go above. For producing both comb and extracted in the same hive, shallow extracting-frames would be much better, so as to allow of tiering.

Now this experience of mine with vertical expansion is in line with what Mr. W. C. Frazier says, on page 546 of "Gleanings:" "A colony will do about as well on 8 as on 10 Langstroth frames, and I don't know but they will do better, as a 10-frame colony's brood-nest is in the wrong shape. But make the 8-frame hive the same capacity as the 10-frame, by adding two inches in depth to the frames, and they will rear as great a percentage of brood in it as they did when it was only the Langstroth depth." I have been waiting with much interest for the veterans to arise and say either "Them's my sentiments," or "Fiddlesticks," on this point. Surely, it is an important matter. Just think of it—with a frame $11\frac{1}{4}$ inches deep, there should be over $\frac{1}{4}$ more brood, at the same time of year, with the same queen, and the same bees! But even the editor did not bestow a foot-note upon it. I

wonder if there is a hitch somewhere. Possibly there would be a slightly greater amount of sealed honey at the top of the frames to make the bees unwilling to enter the sections. Still, that would contradict Mr. Frazier's assertion of as great percentage of brood. It would pay to look into this. Some points might be brought out which would tend to clear up that perpetual mystery which is worrying Dr. Miller—why they should get big crops down at Hamilton. Then, too, it might settle the vexed question of "section honey" in the side frames. There would be no reason for grudging a 10-frame colony 10 pounds of white honey in the side combs of the brood-chamber, any more than to grudge 8 pounds to an 8-frame colony, if the former had reared a correspondingly larger amount of brood, which would put 50 pounds of surplus above instead of 40.

It is only fair to mention that the Heddon hive fulfills the condition of 8-frame width with 10-frame capacity; and those who run big apiaries, and who handle hives instead of frames, need look no further; but there are some of us (and I think there always will be) who prefer to handle frames instead of hives; and 8 frames, in one story, are certainly easier to handle than 16 frames in two stories.

But, for the present, let us imagine that Mr. Frazier will be proved to be correct. What follows? That the Langstroth frame should be superseded by a deeper one.

Three objections may be urged: Deeper frames could not be so easily handled; deeper frames would not be interchangeable with extracting frames, or if they were, the latter would be too large; deeper frames would not be the standard size. The first two sufficiently account for the prevalence of the Langstroth over the Quinby size, without supposing that there is something mysteriously superior about it.

Answers:—1st. I have tussled with Dadant frames of the ordinary hanging type, and want no more of them. But we are getting smarter now, and may get smarter yet. I don't think this objection would amount to much if the frames were the latest style Hoffman (they would have to be wired, of course); and I know it would not if they were Aspinwall frames, as I have had an Aspinwall deep-frame hive on trial this season, and taken solid comfort in it. (Closed-end frames, too;—take notice, Dr. Miller.) Incidentally, it may be noticed that the Aspinwall hive may be contracted without division-boards or dummies—one objection to 10-frame Langstroth hives.

2nd. The greatest good to the greatest numbers: most of us produce comb honey; and quite a respectable array of authorities favor shallow frames for extracting supers.

3rd. This is indeed a terrible objection to encounter. I may be annihilated, but I will try it. In the first place, is not the length and width of the chambers of more importance in preserving the standard than the depth of the frame? Then, though it might not pay to make it even a minor change like this all at once, or to make a change at all if we have all the hives we want already, that ought not to stand in the way of future perfection. If we cannot do what we think best now, suppose we imagine what it may be possible to do a hundred years from now, and begin to work toward it. To cling to a standard because it is a standard, though it may be a strong argument, is never a sufficient one. Looking at it from that point of view—considering what is absolutely best—it seems useless to try to settle on one depth of frame. There ought to be two—shallow and deep—because each has advantages which the other has not. Some one has said that the Langstroth is a happy medium between shallow and deep frames. If a medium always retained the advantages of the extremes, that would close the argument. In this case it does not, and would do so still less if what Mr. Frazier says is true.

The cubical contents of hives has been the bone of contention hitherto; now let

us see what the shape has to do with it. If it is really true that a hive is possible which will combine the advantages of the 8 and the 10 frame, and be better than either without storifying, it should not lightly be passed by because it would not be the standard size.

And it is really important that the question should be discussed without reference to a standard, for some of us will kick over the traces anyhow (witness Dadant, Heddon, Tinker, and a crowd of lesser lights), and we want to know all the bearings of the case. The answers to Query 926 *seem* very authoritative; but put it this way: Suppose there was no standard, how many would have settled on 17% by 9%, or nearly that? I strongly suspect that although the querist did not add the words, "and taking into consideration the desirability of conforming to a standard size"—he probably left out that condition purposely—yet nearly every one of those who answered mentally supplied them. And then, how much authority can we attach to the answer of a man who has had little or no experience with other sizes? The very fact that the Langstroth is so prevalent, proves that few are competent to consider the question of absolutely the best size. In fact, there are plenty of indications to show that this claim of Mr. Frazier's is nothing new, but has been known all along to a few of the best apiarists; and that it has probably only been prevented from receiving recognition because of the reverence paid to the standard. That is all right, but it may be carried too far. Rest assured that some time the absolutely best will be the standard. "Progress" is the watchword of the day. Ours is not a Chinese civilization. We had better yield gracefully while we may. That once admitted, there is plenty of room for discussion as to how fast to change. If it seems best to go very slow, so be it.

Mr. Dayton has an article bearing somewhat on this subject, from the honey-storage point of view, on page 173 of Vol. XXVIII of the "American Bee Journal." He comes to the conclusion that small hives are better *when the Langstroth frame is taken as a basis*. That really leaves the question unsettled.

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wonder if there is a hitch somewhere. Possibly there would be a slightly greater amount of sealed honey at the top of the frames to make the bees unwilling to enter the sections. Still, that would contradict Mr. Frazier's assertion of as great percentage of brood. It would pay to look into this. Some points might be brought out which would tend to clear up that perpetual mystery which is worrying Dr. Miller—why they should get big crops down at Hamilton. Then, too, it might settle the vexed question of "section honey" in the side frames. There would be no reason for grudging a 10-frame colony 10 pounds of white honey in the side combs of the brood-chamber, any more than to grudge 8 pounds to an 8-frame colony, if the former had reared a correspondingly larger amount of brood, which would put 50 pounds of surplus above instead of 40.

It is only fair to mention that the Heddon hive fulfills the condition of 8-frame width with 10-frame capacity; and those who run big apiaries, and who handle hives instead of frames, need look no further; but there are some of us (and I think there always will be) who prefer to handle frames instead of hives; and 8 frames, in one story, are certainly easier to handle than 16 frames in two stories.

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Hutchinson prefaces his recommendation of 8-frame hives with the words, "When the flow is early and short." That condition, or an equivalent, should never be omitted.

To put a home question—If you are selling hives to a customer living in a region of protracted flow, would you advise him to take 8-frame hives? But that, in effect, is just what the catalogues of supply dealers usually do; and that is the conclusion a beginner would probably come to, no matter where he lived, if after reading the recent discussion the 8-frame arguments seemed to him to prevail. Harm has already been done in this way.

Arvada, Colo.



BEES AND FRUIT-BEE-DISEASES.

BY PROF. A. J. COOK.

(An essay read at the recent Farmers' Institute, in Santa Barbara, Calif.)

There are a few facts regarding bees which are not generally known, and which ought to be understood and appreciated by all, especially in a region where fruit-growing is the leading industry.

Bees never injure plants while in bloom; indeed, the blossoms exist for the very purpose of attracting the bees, and without the bees or other sweets-loving insects to pollinate the flowers, many of our most valued fruits would fail to produce. I have proved conclusively the present season that some varieties of plums, cherries, pears, oranges and olives are wholly sterile to their own pollen, or to pollen of the same variety of fruit, while other varieties are largely so. Apricots and navel oranges alone, of all the fruits I have experimented with, were entirely fertile with their own pollen.

It is true that other insects than bees will do this work of pollination; but no other insects can be depended upon. Seasonal peculiarities and insect or fungoid enemies may so deplete—often will so deplete—the numbers of other sweets-loving insects that they will be wholly inadequate to this great accomplishment. Bees, if in the region, can be surely counted on to effect pollination, in all such countries of genial sunshine as California.

Again, it is just as positive that bees never attack or pierce sound fruit. If over-ripe fruit bursts, or if wasp or bird break the skin, then the bees are quick to sip the oozing juice. Thus the honey-bee is not the first aggressor, but the waiting sentinel to discover the leak and prevent waste.

There should be no quarrel between fruit and bee men. Each is a genuine and substantial aid to the other. The apiarist needs the nectar-secreting bloom of the orchard, and the pomologist must have the pollinating bees to secure the largest fruitage.

Fortunately, the diseases of bees are not very numerous or very serious. In California there are only three, and probably none of these need be at all disastrous to the well-informed bee-keeper.

A NEW BEE-DISEASE.—The present season a new malady was discovered in our apiaries in Southern California and several other States. The brood died in the cells in all stages of growth. The black or discolored, larvæ of all sizes and the dead pupæ were found scattered, often thickly, throughout the maturing brood. I secured several colonies, all showing the disease to a greater or less degree, and fed them honey or syrup, variously medicated, and also that which was not medicated. All recovered wholly in a few weeks. Other colonies in the same apiary, where I

procured mine, did not recover. Upon close examination I found two colonies among the 20 in the apiary, which had abandoned honey, and neither showed any sign of the disease. Thus I have wondered if this disease were not owing to a sort of partial starvation. If bees have not sufficient stores to properly feed and breed, we can readily see that many immature bees might fail to develop. I am inclined to believe that our recent trouble came wholly from this condition. We have never heard of any such disease in Sunny Italy, or previously in our own country. We have rarely had such an utter honey-dearth in Southern California. In many apiaries, those well-cared-for, when stores are abundant, there has been no show of the disease. All of these facts, together with my own observations and experiments, lead me to conclude that scant stores, too meager nourishment, and, consequently, imperfect nutrition, caused the mortality so much commented upon the past few weeks. The obvious suggestions are, more care and attention, more honey left in the hives at the close of the season, and careful attention, and, if necessary, feeding in such years of honey-dearth as the present has been.

BEE-PARALYSIS.—This is also called the "nameless bee-disease," and has attracted much attention the last few years, not only in California, but in several States. In this disease the imago, or immature bees, are the ones that die. The dead or enfeebled bees are carried by other bees outside, and thus the ground in front of the hives has constantly a mound of dead bees. Usually the colony does not wholly succumb, but it is so weakened that it produced little or no honey. Generally the colony recovers after a time, usually after the bees have replaced the queen with a young one. This disease has worked considerable havoc in some parts of this State the present season; I think in some cases the loss has been as much from the "new bee-disease," already described, as from the "bee-paralysis."

I am much inclined to the opinion that partial starvation may cause weak mature bees as well as enfeebled larvae, and so it is quite possible that, in some cases, the "nameless bee-disease" may have been credited with harm due to insufficient stores. From my own observation, and from what I can learn from others, I think this last disease comes from some constitutional weakness of the queen, which shows itself in debility of her progeny, the worker-bees. I have known, in several cases, the disease to soon disappear after the queen was superseded; and in other cases, where the bees replaced their queen with a young, healthy one, the disease soon vanished. It is quite possible that those who claim to have cured the evil by some treatment, as giving the bees salt, or salt water, gave their treatment just after the bees had superseded their queen. Others who were unsuccessful with the same remedies, were less fortunate in the date of application. The best advice which can be given, in case the old bees die off too rapidly, is to see that the bees have abundance of food, and in case that fails to bring relief, try re-queening of all affected colonies.

(Concluded next week.)



VARIOUS NOTES AND COMMENTS.

BY DR. C. C. MILLER.

"SMELLY" CISTERN.—I have to thank more than one of the friends for suggesting that a "smelly" cistern may be cured by putting in a bucket pump. It seems that when the water is allowed to stand still for a long time it sort o' decays, and the bucket pump stirs it up. I wonder how much stirring up some lazy people would need, to keep them from having dry rot.

THAT KINKY MAN.—Here's a square, out-and-out *unkinked* apology to that kinky man Thompson. He's given us on page 465 a good quantity of kinks, and they're of good quality, too.

PERSONAL EXPERIENCES.—On page 471 are "Some Personal Experiences" that I read while traveling on the cars. I laughed aloud at some passages, and I suppose the other passengers wondered what ailed me. Then an exquisite tenderness at the close brought a sigh that would not be repressed. All in all, if the writer had been at hand I would have given him a very hearty grasp. But say, Mr. Editor, who is Edwin Bevins,* anyhow? Is he a farmer, shoemaker, lawyer, or what?

In reply to your appeal, Friend Bevins, I assure you there are pleasures in bee-keeping that can never be rated on a cash basis. I keep bees for the money that's in the business, but I hardly know what other business I would stick to so persistently with the same discouraging results I have experienced this year with an outlay of 1,500 pounds of sugar and an income of 20 pounds of honey!

I have some doubt whether a bee-keeper could be considered a thoroughbred if he didn't begin first thing to try to make improvements. But as he gets settled more soberly, he'll begin to think that among the hundreds that have preceded him, some one else may have thought of the very improvements that have suggested themselves to him, and in time he'll get to be more slow in making changes. I haven't a word to say against your making your own hives, but you'll take it good-naturedly—won't you, Bro. Bevins?—if I say a word about your changes.

I don't like the cleats projecting below the cover at each end, but I think you will like the cleats nailed on the end of the cover rather than under or over it. You think you will like better to have your hive so deep that there will be a space below the frames no matter upon what flat surface it is placed. Possibly you may, but I doubt it. I have had such hives for a third of a century—have more than 100 in use now. For several years I have had some that require the $\frac{3}{8}$ -inch strip on the bottom-board. So you see I ought to know pretty well which kind suits me, although I'm not going to insist that you must be governed by my taste. The past summer I sawed off $\frac{3}{8}$ of an inch from some of the old ones, and I shall be glad when they are all replaced. When you go to pile hives one upon another, whether bees are in them or not, it's so nice to have them pile up bee-tight, mouse-tight and moth-tight. With your improvement it is no little trouble to get the entrances securely closed, and the older the hives the greater the difficulty. With the others there's nothing to be done but to pile them up. When you want to allow your bees more than one story to work in (and you'll want to do that some time, even if you don't now), your arrangement won't allow it without having more than double the space you want between the top bars in one story and the bottom-bars in the next story. But having said thus much, I'll be magnanimous and allow you make your hives just as you please.

I sincerely hope that you'll carefully compare the results of the big and little hives side by side in the same apiary, worked for the same kind of honey, and help settle this war that's on. It is one of the things I very much want to know about.

You say that I now condemn feeding sugar syrup to be stored in sections, and intimate that at other times I have upheld it. Now look here, Friend Bevins, I've been misjudged no little in that direction, and have generally kept quiet about it, but I can't stand it to keep quiet and have you think that way. A man with as much brains as I think you have, ought to be able to see the truth without prejudice, and a man with as good a heart as I think you have, I can't bear to have think ill of me.

Now suppose you put your finger on the spot where I ever said a single word in

favor of the practice in question. I am safe in saying that you can find no single word in that direction, for I never favored it, and I am not in the habit of thinking one way and speaking another. You hint about its being expedient "to avoid saying anything about it." Does that condemn? Weren't there thousands of good men who were entirely silent about it? Do you condemn them? Were you not silent about it yourself?

But if you'll take the trouble to look, I think you will have no trouble in seeing that I committed myself on the side you think right. I have an impression that no man did any more than I did to stop the discussion that we thought was doing harm, what I said being all the more effective just because it was not said publicly.

I think I hear you say, "Yes, all you say may be true, but then you cannot deny that you defended the man who started the discussion." Let us look at the nature of that defense. Prof. Cook said he thought bees could make genuine honey out of cane-sugar. No matter how much he may have been mistaken in his view, he was honest in his belief. Prof. Cook is no deep-dyed villain. If there's an honest man in our ranks, he's one. But we thought he was wrong in his views, and we called out, "Shut up." He shut up. Then the cry was raised, "He must apologize." And for what? For uttering what he believed to be a truth—a truth that he thought would be of benefit to bee-keepers? Just look that thing square in the face, Friend Bevins, and see if you think it looks reasonable. Is there anything about it that looks kind or just? Against that wicked demand I raised my voice in protest, and if I have any regret in the case, it is that that protest was not more vigorously expressed.

Now there are two things that are entirely separate, that I think you and some others have been inclined to mix. One is that Prof. Cook is mistaken in his belief, and that it is not wise to discuss that belief. That's a thing by itself on which you and I are agreed, and I think you will give me credit for calling a spade a spade.

The other is an entirely separate thing, and I will try to call "a spade a spade" as I attempt to characterize it. It was the frantic effort to make him apologize† for speaking what he believed to be a good and useful truth—an effort that I denounce as unjust, uncharitable, unchristian. Those who participated in it, and who know Prof. Cook for what he is, when they come to give the matter a sober second thought will have no feeling of self-gratulation at having wounded a heart so loving and true, and as the shadows of life's evening gather about them, and the softened feelings of their better natures assert themselves, their only regret will be that they did not themselves apologize to Prof. Cook.

Marengo, Ill.

[*We'll have to call on Bro. Bevins to "stand up" and identify himself. Sorry to say that all we know of him, Doctor, is that he's one of our regular subscribers, and a splendid writer. Further than that, "this deponent saith not."

†We think Dr. Miller is greatly mistaken in saying that anybody wanted Prof. Cook to "apologize" for anything he conscientiously *believed* in regard to the sugar-honey matter. We certainly didn't. What we did want, was that those who were the main originators and defenders of the sugar-honey idea should at least express a regret if the result of their suggestions should finally be detrimental to the interests of honest honey-production. That could have been done in one sentence. But no; they chose to say nothing at all if they couldn't press their favorite (but to us, and to most others, *much mistaken*) claims for sugar-honey. The whole thing was most unfortunate. But that matter is not going to be "aired" again in the "American Bee Journal" right away. Bro. Bevins may reply to Dr. Miller's question, if he thinks it worth while, but that must end it in this bee-paper.—Ed.]



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Report for 1894.

I had 13 colonies, spring count, with no swarms during the season. I increased by the nucleus plan, after Aug. 5, to 24. I bought 2 prime swarms on June 25 at \$2.50 each, and furnished the hives. One gave about 90 pounds of surplus, and the other not one pound. There is no basswood in this locality, so I moved my bees about 6 miles on July 3, then on August 5 I moved them 15 miles for buckwheat, which lasted 36 days. Bees are all at home now and in good condition for winter. My crop is as follows, all extracted honey: From clover, 15 pounds; basswood 82 pounds; buckwheat, 1283 pounds. I have sold about 800 pounds of the buckwheat honey at 10 cents per pound.

GEORGE A. FORGERSON.

Rosemount, Minn., Oct. 22.

One of the Asters.

I enclose sample bloom of a kind of plant we have in this part of the world that we call "wild aster." It comes in to bloom about Sept. 10, and continues in bloom until freezing weather, and furnishes more honey and pollen than any other plant we have. If it had not been for it, I don't believe that one colony of bees in 50 would have had stores enough for winter, unless they had been fed. Sept. 1 the bees were about out of honey, but now every frame is full of honey, and some colonies are working in the supers. I never saw bees work stronger on clover than they have on the asters since Sept. 15.

This plant came to this country in the last few years. At first there were only a few plants here and there, but now it has about taken all the waste land in the country. It seems to take on old meadows and clover fields best, and during the hot, dry weather the past sum-

mer, when all other plants were dried up, the asters were green and fresh as in springtime.

If any bee-keepers want seed of the asters, if they will send me six cents in stamps, to pay postage and putting up. I will take pleasure in sending a small package. I am confident that if the plant does as well in other climates as it does in this, it would save bee-keepers hundreds of dollars, and solve the winter stores problem.

This has been a very dry season here, and very little surplus honey.

The "old reliable" "American Bee Journal" is a welcome weekly visitor—always on time, and something good in every number.

W. S. FEEBACK.

Carlisle, Ky., Oct. 13.

[The plant is an aster, but the specimens sent was not complete enough to tell what species.—EDITOR.]

Varieties of Golden-Rod, Etc.

I notice on page 538 G. W. N. describes the varieties of golden-rod from which bees get most honey in this locality, viz.: *Solidago lanceolata*—narrow leaved golden-rod—the edges of the leaves not toothed, notched or divided, the flowers in flat-topped heads in little clusters crowded. Grows 2 to 3 feet high in moist soil. This variety yields nectar during the latter part of August and forepart of September, and when abundant in the hives, gives off a very disagreeable odor, while the bees are evaporating it, so that a novice sometimes imagines that a bad case of foul brood has developed in his apiary.

Gray's "Manual of Botany of the Northern United States," revised and extended to the 100th meridian, gives 42 varieties of golden-rod, 20 of which are found in our (Conn.) State. We have had a fine honey-flow here from this plant and the asters. Bees work but little on either of these plants on dry ground, but in moist and wet localities they can be found from the time they commence to bloom until killed by frost.

JOHN K. GOODRICH.

Waterbury, Conn., Oct. 26.

Called "American Colombo."

Being a subscriber, and something of a bee-man myself, I deem it my duty to do whatever lies in my power to assist the fraternity. Having occasion to make repeated trips into the mountains the

past summer, I noticed a plant upon which the bees fairly swarm, to the neglect of everything else in the vicinity of it. I send a specimen in the shape of the seed-pods and seeds.

The leaves of this plant resemble somewhat the tobacco plant, or more nearly what in the New England States we used to term "skunk cabbage." From the clump of leaves a stalk is sent up to a height from six to twelve feet, and with flowers surrounding the stalk from the bottom to the top, as is shown by the small piece of the top of the stalk inclosed in the package. Passing by one of these plants, from the humming one would suppose that a whole colony of bees was busily at work on a single stalk.

This plant grows in ravines where it is damp during a good portion of the year, and I think that an acre of the plants would keep a whole apiary busy during the flowering season. Whether it would yield a good-flavored honey, or whether it would be healthful, I cannot say. Perhaps you can classify it, and give me some information about it.

WM. N. KELLY.

Prescott, Ariz., Oct. 7.

[The plant is *Frasera speciosa*, or American colombo. The reason the bees like it so well is that on the middle of each petal, on the inside, is a pair of hairy glandular bodies.—T. J. BURRILL.]

Queens and Queen-Rearing.

If you want to know how to have queens fertilized in upper stories while the old queen is still laying below; how you may safely introduce any queen, at any time of the year when bees can fly; all about the different races of bees; all about shipping queens, queen-cages, candy for queen-cages, etc.; all about forming nuclei, multiplying or uniting bees, or weak colonies, etc.; or, in fact, everything about the queen-business which you may want to know—send for Doolittle's "Scientific Queen-Rearing"—a book of over 170 pages, which is as interesting as a story. Here are some good offers of this excellent book:

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Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Colo.

CALIFORNIA.—The next regular meeting of the Central California Bee-Keepers' Association will be held on the first Wednesday in December, at Hanford, Calif. You are cordially invited to attend.
Lemoore, Calif. J. F. FLORY, Sec.

PENNSYLVANIA.—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program.
Franklin, Pa. C. S. PIZER, Sec.

ILLINOIS.—The next annual meeting of the Northern Illinois Bee-Keepers' Association will be held on Dec. 18 and 19, 1894, in the Supervisor's room of the Court House, in Rockford, Ill. All interested are invited to attend.
New Milford, Ill. B. KENNEDY, Sec.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin now to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

INDIANA.—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1½ fare for the round trip, but a certificate must be asked for when purchasing your ticket. Programme will be issued in December.
WALTER S. POUDER, Pres.

Indianapolis, Ind.

ILLINOIS.—The Illinois State Bee-Keepers Association will meet at the State House in Springfield, on Tuesday and Wednesday, Nov. 13th and 14th, 1894. On account of the meeting of the National and State Granges at the same time and place, railroad rates of 1½ fares for the round trip are sure, if each person attending will not fail to get a certificate when he buys his ticket. The time has come when bee-keepers of the State, if they take proper steps, may obtain recognition in the experiment station. So let us have a full representation from all parts of the State, as well as from other States.
Bradfordton, Ill. JAS. A. STONE, Sec.

WISCONSIN.—The Southwestern Wisconsin Bee-Keepers' Association will meet in the Opera House in Montford, Wis., Nov. 14 and 15, 1894. There will be a free-for-all "Question-Box and Answers," also a grand display of races of bees, implements and supplies. If you have anything of interest to bee-culture, please bring or send it. Montford has offered plenty of music, and SPECIAL REDUCED BOARD. The following is only a part of the program: President's Address, N. E. France. Queen-Rearing, J. W. VanAllen. Swarming—Natur

al or Artificial. Delos Ricks. Pasturage, Jas Fisher, Jr. Marketing Honey, M. M. Rice How to Winter Bees. Austin Dexter. Location of Apiary, E. Pike. Removing Queens During the Honey-Flow. A. A. Arms. Best Hive, F. F. Zellmer. Experiments, Geo. Lee. Comb Foundation, N. E. France. If you are interested in bees you cannot afford to miss this meeting. Come and bring your lady with you. Hurlbut, Wis. A. A. ARMS, Sec.

N. E. OHIO AND N. W. PA.—The Northeastern Ohio and Northwestern Pennsylvania Bee-Keepers' Association will hold its next regular annual meeting in the parlors of Hotel St. Nicholas, at Corry, Pa., on Nov. 21 and 22, 1894. A good program has been arranged. Bring your questions for the question-box. The hotel is opposite Union depot; rates have been reduced to \$1.50 per day to those attending the convention. Programs can be had by addressing the Secretary. Everybody, especially ladies, is invited to attend. Mosiertown, Pa. GEO. SPITLER, Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers Association will meet at the Court House in Charlotte, N. C., on Dec. 6, 1894, at 11 o'clock a.m. A full attendance is desired. Steel Creek, N. C. A. L. BEACH, Sec.

Capons and Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year for \$1.10.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

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J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN,
28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 103 Park Place.
FRANCIS H. LEGGETT & Co., 128 Franklin St

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMONS-MASON COM. CO., 423 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & Co., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Honey & Beeswax Market Quotations

CHICAGO, ILL., Sept. 17.—The honey market is quite active. We are getting good prices considering the hard times, owing to the reported scarcity of crop. We quote: Fancy white, 15c.; No. 1, 14c. Extracted, 6@7c. Beeswax, 25@26c. J. A. L.

CHICAGO, ILL., Oct. 25.—White clover honey continues to bring 15c. The receipts are about keeping pace with the demand. The quality is very satisfactory as a rule, being heavy and of good flavor. Extracted continues to sell chiefly at 6@7c., according to color, flavor and style of package. Beeswax scarce and in good demand at 27@28c.

R. A. B & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c.; 2-lbs., 12@2c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 50@55c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

KANSAS CITY, Mo., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Sept. 20.—The demand for comb honey is increasing, in a jobbing way, in spite of the continued warm weather. Both comb and extracted honey is arriving freely. We quote: Fancy clover, 1-lbs., 13@15c.; white clover, 12@13c.; fair, 10@12c.; buckwheat, 10@11c. Extracted, clover or basswood, 6@6½c.; buckwheat, 5@5½c.; Southern, 45@60c. per gallon, according to quality. Beeswax, 25@27c. C. I. & B.

CINCINNATI, O., Oct. 19.—There is a very good demand for choice white comb honey at 14@15c. Demand is fair for extracted at 4@7c., according to quality. Comb honey brings best prices now, when it is something new yet and comparatively scarce, and not at Christmas-time, when markets are generally overstocked.

Beeswax is in good demand at 22@27c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, Mo., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c.; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C-M. C. Co.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat, 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, 6½@7c.; buckwheat, 5½@6c. Beeswax, 27@

29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. K. W.

BUFFALO, N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14@15c.; choice, 12@13c.; buckwheat and other, 9@10c. B. & Co.

We are pleased to again call our readers' attention to the advertisement of the Famous Manufacturing Company, of Chicago, who, if all do not, should know by this time, manufacture the "Champion" Incubators and Brooders. They have for this season a machine that cannot fail to give satisfaction, as it embodies all of the best principles that their years of experience have proven to be correct, as well as new improvements that they have found valuable in artificial incubation. Their elegant catalogue, full of practical information, will be sent free on application, if you enclose a two-cent stamp to help pay postage.

Profitable Bee-Keeping, by Mrs. Atchley, will continue for some time in her department of the BEE JOURNAL, at least each alternate week. Until further notice we can furnish the back numbers from May 1st, beginning with her "Lessons," to new subscribers who pay \$1.00 for a year's subscription to the BEE JOURNAL—that is, we can commence their year with the number having the first lesson, if they so desire.

"Foul Brood; Its Natural History and Rational Treatment," is the title of an interesting booklet by Dr. Wm. R. Howard, of Texas. It also contains a review of the work of others on the same subject. It is being sold at the office of the BEE JOURNAL. Price, postpaid, 25 cents; or clubbed with the BEE JOURNAL for one year—both together for \$1.15.

Honey as Food and Medicine is just the thing to help sell honey, as it shows the various ways in which honey may be used as a food and as a medicine. Try 100 copies of it, and see what good "salesmen" they are. See page 571 of this number of the BEE JOURNAL for description and prices.

"As for me, I could not very well live without the weekly visit of the 'Old Reliable.'—H. Dupret, of Canada, Nov. 1, 1894.

Good Honey-Sellers ought to be needed now, and the little 32-page pamphlet, "Honey as Food and Medicine," has for years proven itself valuable in making repeated sales of honey. Its distribution will create a demand for the honey first, and then the bee-keeper can follow it up and supply that demand. Send to us for a sample copy, only 5 cents; 10 copies, postpaid, 35 cents; 50 copies, \$1.25; or 100 copies \$2.00. Try 50 or 100 copies, and prove their ability to aid you in disposing of your honey at a good price.

Advertisements.

HONEY PAIRS On present stock all orders are subject to prior sale, all pairs tested. 10-lb. pairs, per 100, \$3.00; 5-lb. pairs, per 100, \$4; 2½-lb. pairs, per 100, \$3.50 at our warehouse. Terms net cash. 19 A2t **HORN & CO., Keokuk, Iowa.**
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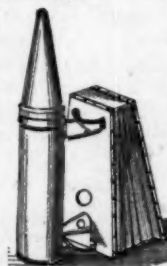
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